First of a Series on
BIBLE ANIMALS

ANIMALS OF THE BIBLE

by

MARYL ANDRE
Raymond Foundation

Museum Stories, No. 332
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Animals of the Bible

In Genesis, the first book of the Bible, we find that the people who wrote the Bible were very much aware of the world around them. They observed and recorded what they could see of the natural world. They saw the differences among animals of the water, the sky, and the land. They could see that some swam, some were air-borne, some walked, and some crawled. They watched closely enough to see that each had special habits and that each lived in a special place.

We read in Genesis: "And out of the ground the Lord God formed every beast of the field, and every fowl of the air; and brought them unto Adam to see what he would call them: and whatsoever Adam called every living creature, that was the name thereof." Each man who translated the Bible into his own language used the animal name familiar to him. Many kinds of animals were known by one name (all animals that lived in water were called fish), and one kind of animal may have had many names (cattle were called oxen, cattle, kine, bullocks). We try to understand the animal names in the Bible in terms of what we know of the animal life of ancient times.

The areas populated by the Israelites at the time of which the Bible tells included great forests, open grasslands, and trackless deserts. We try to learn the natural history of that part of

the ancient world from the stories that have been handed down by word of mouth and eventually written, centuries later, often in story form. Today we base our knowledge on fossils found by digging in the area. We know what animals lived in the Holy Land in one period after another, beginning with Stone Age man right down to the present time.

From piles of bones that have been excavated near altars we know which animals were used by the Israelites for sacrificial purposes. Cattle, goats, sheep, turtledoves, or pigeons without blemish were chosen as offerings.

The Book of Leviticus tells us which animals the Israelites were allowed to eat and which they were not allowed to eat. Some of the ones that they could eat were animals described as cloven-footed and chewers of the cud (cattle, goats, ibexes, antelopes, gazelles), fish with scales and fins, locusts, crickets, and quail. Animals that were forbidden for food were the camel, coney, hare, swine, eagle, osprey, kite, owl, falcon, raven, ostrich, sea gull, cormorant, pelican, vulture, stork, heron, lapwing, and bat. Creeping things were forbidden: the weasel, mouse, tortoise, ferret, chameleon, lizard, snail, and mole. You will notice that the bat is grouped with birds, while both vertebrates and invertebrates are talked about in the same group of "creeping things."

The wild animals known to the Israelites of the Old Testament were those native to Africa and Asia Minor—the lion and leopard, the jackal, cobra, and elephant (not named, but ivory was referred to frequently). The giraffe or "camelopard" was called by the Hebrew word meaning "to crop leaves," a good description of this long-necked leaf-eater. Apes and monkeys were worshipped by the ancient Egyptians.

Some animals were referred to with mythical or romantic names. "Unicorn" is believed to describe the single-horned rhinoceros. The "behemoth" was the hippopotamus, and the "leviathan" was the crocodile.

All Bible quotations in these stories are from the King James Version

This page is for your own notes and illustrations

Second of a Series on

BIBLE ANIMALS

CAMELS

by

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Raymond Foundation

CHICAGO NATURAL HISTORY MUSEUM
RESEARCH EDUCATION
FOUNDED 1893 BY MARSHALL FIELD

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Camels

In Bible times a man's wealth was judged by the number of domesticated animals he owned. Today this is true among dairy farmers and beef-cattle ranchers. Job was said to have owned three thousand camels besides other animals, and so by the standards of the day he was a wealthy man.

Camels were used in ancient Palestine as well as in China, Babylonia, and Egypt. They carried burdens across the desert. They were used to ride in time of war. The hair of camels was woven into coarse cloth, which was used to make garments and sometimes tents. Camel milk was drunk, especially during the month or six-week period when herdsmen were with their herds in pasture far from water supply.

Camels used for riding were usually the one-humped camels, or dromedaries. The dromedary camel is slim and has long legs, and the soles of its feet are soft. It can travel at a steady rate of eight or ten miles an hour for eighteen hours over hot ground such as the Egyptian desert. Camels with two humps (Bactrian camels) were used to carry the heavy burdens in the merchants' caravans over the deserts and mountainous country of China and central Asia. The Bactrian camel is still used for this purpose. It can travel about thirty miles a day at the rate of three or four miles an hour with a load of three to six hundred pounds tied across its back. It has longer, shaggier hair and is bigger and stronger (although it has shorter legs) than the one-humped dromedary. The Bactrian (two-humped) camel can take the cold weather and storms of Asiatic mountain deserts better than can any other beast of burden.

It is well known that all camels can go for long periods without food or water. This and the fact that they eat coarse desert vegetation made them valuable animals to the ancient people who traveled across deserts and over rugged mountain-ranges where food was scarce and water hard to find.

The ancient cities of the Bible were encircled by high walls very much like the stockade fences of our own frontier towns. There was only one big gate in the wall through which traffic

could move in and out of the city. At nightfall the gate was closed and locked, and the only entrance was by a small door just large enough for a man to pass through. This doorway was called the "needle's eye." You can imagine what a difficult time a camel with a full load on his back would have going through the needle's eye. The driver had to remove the load and then encourage the camel to kneel down and shuffle through the doorway on its knees. Once inside, the load would have to be replaced. Not only the camel had difficulty going through the needle's eye, but it was hard work for the driver as well. The Bible tells us: "For it is easier for a camel to go through a needle's eye, than for a rich man to enter into the kingdom of God" (Luke 18:25).

You may be surprised to learn that the camel family started life in North America about 45 million years ago. Before the end of the Pleistocene epoch, which began about one million years ago, camels and their relatives had traveled to South America by way of Panama and to Asia across land connections then in existence at the Bering Strait. Today there seem to be no wild camels in the Old World, although some two-humped (Bactrian) camels live in the deserts of Asia and Africa. These are thought to be camels that have escaped from domesticated herds and returned to the wild state.

An effort was made about the middle of the past century to bring the camel back to our frontier Southwest. But the experiment proved unsuccessful and about thirty camels were turned loose to roam wild. They became a menace to farmers' crops, and laws were enacted to have the "wild" camels shot on sight. The last one was killed at Yuma, Arizona, in 1899.

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Third of a Series on
BIBLE ANIMALS

CATTLE

by

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Cattle

The Book of Genesis tells about the great seven-year drought and the famine it caused. It was then that Joseph's brothers went from Canaan to buy food for themselves and grain for their animals at the storehouses in Egypt where Joseph was governor of the land. At the Pharaoh's command Joseph's father and his entire family with their herds and flocks moved into Egypt where food was plentiful.

When the Pharaoh who ruled during Joseph's lifetime died, the new Pharaoh grew suspicious of the Israelites and enslaved them. But the Israelites, who were nomad herdsmen before they went to live in Egypt, wanted to take their herds of cattle with them when they escaped from bondage to find the Promised Land. In the Book of Exodus we read of the catastrophes that beset the Egyptians before the Israelites were finally allowed to take their herds of animals out of Egypt. Had the Israelites left their herds behind they would have left their entire wealth and their only means of livelihood.

In the Bible the word "cattle" was used to refer to all domesticated animals, large and small: goats, sheep, horses, oxen, camels, and asses. The oxen of the Bible were probably the recently domesticated descendants of the aurochs, or urus. In ancient times this animal roamed wild over most of Europe and western Asia. Domestic oxen were known to the Chinese as beasts of burden as early as 3000 B.C., and the Egyptians, Babylonians, and Israelites knew them as dairy animals. We usually think of oxen being used only to pull carts and plows, and they are still used for this in many parts of the world. They were used in our country until early in this century, especially in lumbering camps, where roads were rough.

In Bible times there was a distinction between cattle kept in enclosures and fed and those allowed to graze in pasture. The stabled animals were used as animals of sacrifice. Today the zebu, or humped cattle of India, are considered sacred by the Hindus. These animals are descendants of the aurochs, too. The zebu bull is dedicated to Brahma, the Hindu Supreme Cre-

ator, and is allowed to wander as he pleases through the streets of the villages and even into shops and gardens. Ranchers of our Southwest have recently crossbred their cattle with Brahma cattle (or zebu), hoping to produce a breed that can withstand the climate and diseases of that area.

There are no more wild cattle, as we commonly understand the name, but there are some members of the cattle tribe still in the wild state. The American bison has never been domesticated, nor has the African buffalo. The African buffalo is one of the most savage of the big-game animals left in the world. Even the elephant and the bad-tempered rhinoceros give the African buffalo the right of way when they meet it.

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Fourth of a Series on

BIBLE ANIMALS

LIONS

by

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Lions

The Bible story of Daniel being thrown into the lions' den and coming out the next morning unharmed is familiar to all of us. This seems a miracle indeed, for everyone knows about the strength and savagery of Leo the Lion, King of Beasts.

Lions are easily trained because they are intelligent, learn easily, and are really a friendly kind of animal. The trainer realizes, though, that lions are not tamed animals and that if he shows nervousness he will upset the lions and cause them to attack him.

The Psalms of David mention the young lions roaring after their prey until the sun rises, when they seek the shelter of their dens. But the roar of the lions is not a manifestation of hunger. There is no apparent reason for their noise—they roar when they feel like roaring. At Lincoln Park Zoo, in Chicago, where the lions are fed in the evening, they begin their noisy grunting and roaring after they have been fed, and sometimes they keep it up until morning.

In several places in Jeremiah the lion appears as a symbol of destruction not only of man but also of his possessions, especially his domestic animals. And in Proverbs we read: "There is a lion without, I shall be slain in the streets." There are no lions now in Palestine. There are still a few in northwestern India, and in Africa they are abundant. Lions will attack herds of domesticated animals, and sometimes if a man is alone he will be attacked. This usually happens when a lion too old to stalk and catch wild animals for food is forced to turn to a diet of defenseless human beings.

A few years ago an appeal was made to the British Government to send a professional hunter to exterminate lions in an area of Kenya where herds of cattle were victims of an epidemic and the lions were feeding on the carcasses. With food so plentiful, the lions had increased in numbers and boldness to the point where they were a threat to the herdsmen. In a three-month period eighty-eight lions and ten leopards were killed by one professional hunter and his Masai spearman.

Lions are considered social by nature. They live together more or less peacefully in large groups, which are called prides. As many as six male lions have been seen placidly eating together from the carcass of an animal. Too, lions living in captivity multiply readily.

Lions are known to choose grasslands near a waterhole, spring, or river to rest during the day and to lurk in wait for other animals who come to quench their thirst. Lush grass and good water-supply would have been important to the nomad herdsmen of Bible times. And their domesticated animals would be easy prey to hungry lions. It is no great wonder that the people of this lion-infested land dreamed of the day of peace when the "wolf also shall dwell with the lamb, and the leopard shall lie down with the kid; and the calf and the young lion and the fatling together; and a little child shall lead them. . . . and the lion shall eat straw like the ox" (Isaiah 11:6, 7).

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Fifth of a Series on

BIBLE ANIMALS

SERPENTS

by

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Raymond Foundation

CHICAGO NATURAL HISTORY MUSEUM
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Serpents

"Now the serpent was more subtil than any beast of the field which the Lord God had made . . . " (Genesis 3:1). The serpent in the Garden of Eden that tempted Eve to eat the fruit from the forbidden tree was the first symbol of evil that man recognized in his spiritual life on earth. Many people believed that all serpents are evil, and some people felt that all crawling things are evil and should be feared. Even today most people are afraid of snakes.

The "asp" is mentioned in the Book of Isaiah. Probably this is the Egyptian cobra, the one the Israelites knew to be sacred to the gods and goddesses of their captors in Egypt. The cobra is a venomous snake with fangs that act like small hypodermic needles through which poison can be injected into the wound made by the sharp point of the teeth. This cobra, when disturbed, makes a fearsome-looking hood by expanding its ribs just back of its head and allowing the loose skin covering its ribs to spread out like an umbrella.

Venomous snakes shed their fangs as well as their solid teeth. There are about three fangs in various stages of development. When the new fang cuts through, it grows beside the old one, ready to move into the socket as soon as the old one falls out or is pulled out. There are always (bar accident) two workable fangs in the venomous snake's upper jaw. A venomous snake is immune to the effects of its own venom. In fact this very much modified saliva may even help in digesting the prey killed by the injection.

Psalm 140 refers to "adders' poison." The European viper is still called an "adder" in present-day Britain. Vipers are different from cobras in that they have much longer fangs. When not in use, the viper's fangs can be folded back against the palate. The venom sacs of the viper are under the skin behind the eyes. The sacs, one on each side of the head, are connected to the base of the fangs by ducts.

The Book of Numbers tells of "fiery serpents" sent to bite the people who complained about their hardships. It also tells

how Moses made a "serpent of brass, and put it upon a pole, and it came to pass, that if a serpent had bitten any man, when he beheld the serpent of brass, he lived."

The serpent has been associated with healing since the days of the ancient Egyptians. "Snake-oil" remedies were highly recommended by the pioneers of our country. Snakes have been used as symbols of healing ever since Aesculapius, Greek god of healing, had for his emblem a staff with one snake twined around it. This symbol is known as the caduceus. It is used as an official emblem of various medical organizations.

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Sixth of a Series on

BIBLE ANIMALS

MARINE MAMMALS

by

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Raymond Foundation

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Marine Mammals

When Moses brought to the Israelites the tablets of stone on which were engraved the Ten Commandments he also brought detailed instructions for the building of the Ark of the Covenant. This Ark went with the people on their journey from Mount Sinai to the Promised Land. Part of the instructions for making the outside covering of the Ark reads: "And thou shalt make a covering for the tent of rams' skins dyed red, and a covering above of badgers' skins" (Exodus 26:14).

Leather made of badger skin is soft and fine and was used to make luxurious clothing. Some interpretators of the Bible felt that it would make an appropriate covering for the Ark. Badgers would have been very difficult for the Israelites in their wilderness to find because badgers come out of their dens only at night. When disturbed, badgers can almost sink into the ground because they dig so fast with all four feet.

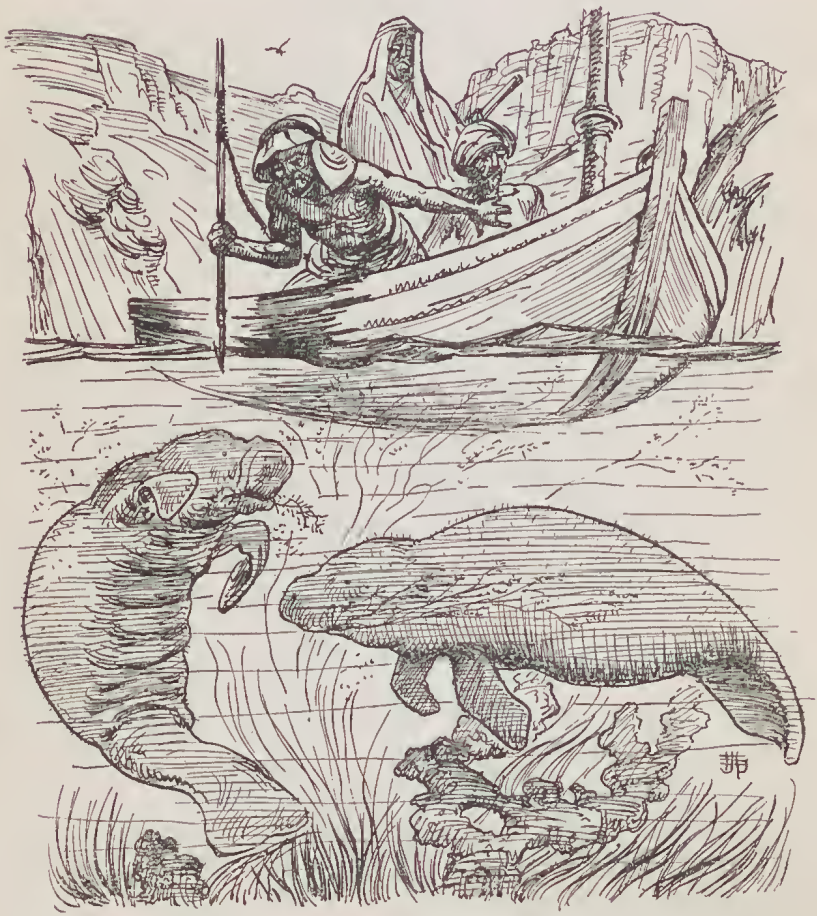
Later translations of this verse give "sealskins" instead of "badgers' skins" (little evidence has been found to lead us to think that the badger lived in the area). The bodies of water in that part of the world that are large enough to sustain marine mammals are the Mediterranean Sea and the Red Sea, and no seals have been known to live in those waters. Some scholars of the natural history of the Bible have suggested that "sealskin" might mean the skin of the porpoise or of the dolphin. Here again the Hebrew name is given in English for the animal that was familiar to the translator. In other versions the Hebrew is translated to mean the skin of the dugong, an animal that lives in the Red Sea.

Of these marine mammals the Red Sea dugong is probably the one that was intended. It would produce the largest skin of the animals named. This skin would be the easiest to prepare too, because it is hairless except for a few bristles around the mouth. Dugong skin is about an inch thick and would have made a good protective covering for the precious Ark.

Many Israelites who lived around the seashores were fishermen and observed much of the life of the waters. They knew

the whale. They had opportunity to see sperm whales in the Mediterranean Sea. The Book of Jonah refers to the "great fish" that the Lord prepared to "swallow up Jonah." People of the Bible did not distinguish whales from fishes, and they thought that anything that lived in the water must be a fish.

Some translators called this "great fish" a "sea monster." This translation may have been inspired by the legend of Greek mythology about the rescue of Andromeda from a sea monster by Perseus that took place at Joppa. And the city of Joppa, a three-day journey from the city of Nineveh, is thought to have been the place that Jonah was thrown upon the beach.



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Seventh of a Series on

BIBLE ANIMALS

FISHES

by

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Raymond Foundation

CHICAGO NATURAL HISTORY MUSEUM
RESEARCH EDUCATION
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Fishes

Commercial fishing was a profitable occupation long before Bible times. The ancient Egyptians depended on fishes for a large part of their food. Moses did a drastic thing when he caused the water of part of the Nile River to turn to blood. We read about this in Exodus: "and all the waters that were in the river were turned to blood. And the fish that was in the river died . . . " This probably meant a serious shortage of food for the Israelites as well as for the Egyptians.

The kinds of fishes that the people of Bible lands ate are not identified. We have the clue: "These shall ye eat of all that are in the waters: whatsoever hath fins and scales in the waters, in the seas, and in the rivers, them shall ye eat. . . . Whatsoever hath no fins nor scales in the waters, that shall be an abomination unto you" (Leviticus 11:9, 12). This excluded the sea animals that we call shellfish—oysters, crabs, and shrimps—animals that are not fish at all.

On their journey from Egypt through the wilderness the Israelites spoke with great longing of the life that they had left behind. "We remember the fish, which we did eat in Egypt freely; the cucumbers, and the melons, and the leeks, and the onions, and the garlick" (Numbers 11:5). Many of the followers of Jesus, indeed several of his twelve apostles, were fishermen by trade. Many of the stories told about the good deeds of Jesus refer to fishes or to fishermen.

Probably the most widely known reference to fish is found in the New Testament. Jesus, after blessing five loaves of barley bread and two fish, fed a gathering of about five thousand people, and the fragments that were left filled twelve baskets. This was indeed a miracle, and it shows us that the people of Bible times considered fishes an important food.

In the Gospel of Luke we read about the fisherman Simon Peter who caught so many fish after Jesus told him where to cast his nets that help was needed to bring the nets to the boat. The fishermen Simon Peter, James, and John became the first disciples of Jesus.

Fishes were so important in the lives of people of Bible times that in the first chapter of Genesis we read: "And God said, Let the waters bring forth abundantly the moving creature that hath life, and fowl that may fly above the earth in the open firmament of heaven. . . . And God blessed them, saying, Be fruitful, and multiply, and fill the waters in the seas, and let fowl multiply in the earth." Birds are found today in almost every climate. But of the backboned animals that live in the waters, including fishes with fins and scales, there are far more different kinds than of all other backboned animals that live on the ground or in the ground or in the air.

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Eighth of a Series on
BIBLE ANIMALS

NATURAL WISDOM

by

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Natural Wisdom

King Solomon was considered the wisest of the rulers of Bible times. It is interesting to learn how much of his wisdom was gleaned from the observation of laws of nature. He must have been a patient student of animal habits and animal lore.

If you turn to the Book of Proverbs you will find that King Solomon said: "Go to the ant, thou sluggard; consider her ways, and be wise: Which having no guide, overseer, or ruler, Provideth her meat in the summer, and gathereth her food in the harvest. How long wilt thou sleep, O sluggard?"

The industry of the ants, especially a young queen ant, is almost miraculous. After her short wedding flight the young queen tears off her wings and, without experience, settles down to start a new colony all by herself. She digs the first tunnel in the ground, being careful to hide each grain of dirt far away from the opening. She lays eggs and feeds the young ants. When the first eggs mature into adult workers, the queen is free to pursue her primary job, that of laying eggs. The workers then take over the chores of the colony—keeping house, searching for food, feeding the queen, and caring for the eggs and the young ants. They go right to work without being shown their duties. We call this instinct, and to the people of the Bible it must have seemed like something supernatural. The ants referred to in Proverbs are the harvester ants that store seeds against bad weather. They even snip off the sprouts to keep the seeds from growing into plants.

Agur, a student prince of King Solomon's time, saw the patterns and designs of living among the animals as King Solomon told of them, and he marveled: "There be three things which are too wonderful for me . . . The way of an eagle in the air; the way of a serpent upon a rock; the way of a ship in the midst of the sea . . . " (Proverbs 30:18, 19).

Again Agur said: "There be four things which are little upon the earth, but they are exceeding wise: The ants are a people not strong, yet they prepare their meat in the summer; The conies are but a feeble folk, yet make they their houses in the

rocks; The locusts have no king, yet go they forth all of them by bands; The spider taketh hold with her hands, and is in kings' palaces" (Proverbs 30:24–28).

The "cony" referred to here is the hyrax, but this is not the same "cony" used today to make women's fur coats. There is a European rabbit that is sometimes called a cony, and the fur of this animal is used in "cony" fur coats. The hyrax superficially resembles a rabbit more than it does its real relative the elephant, but its fur is never used to make coats. There were no rabbits living in Palestine at the time of King Solomon but many hyraxes. Even today the hyrax is abundant on rocky hillsides of the Holy Land.

The use of animals to illustrate traits of human character shows that the ancient people were very familiar with the habits of the animals of their world. To attain the wisdom and knowledge befitting a king, the wonderful "ways" of the world of nature were learned by observation. The understanding of nature was based on folklore and common sense rather than on scientific research as we know it today.

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